

May 8, 2007

**STATE OF NEW HAMPSHIRE  
DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAY DESIGN**

**CONFERENCE REPORT**

**PROJECT:** Andover 14169

**DATE OF CONFERENCE:** April 5, 2007

**LOCATION OF CONFERENCE:** Town Meeting Hall, 31 School Street, Andover

**ATTENDED BY:** See Attached

**SUBJECT:** Andover Public Officials/Public Informational Meeting for the NH Route 11 over NH Route 4 and abandoned railroad bridges rehabilitation/replacement

**NOTES ON CONFERENCE:**

David Scott, Project Manager, of the New Hampshire Department of Transportation (NHDOT) introduced himself and explained that the reason for this Public Officials/Public Informational (POPI) meeting was to get the town's input on the rehabilitation or replacement of the NH Route 11 over NH Route 4 and abandoned railroad bridge. David mentioned that a meeting was held earlier at the request of Representative Danforth to discuss this intersection. The NHDOT looked at several options and have come back to get the town's input on these options and any other questions and comments. David let the audience know that this input would be brought back to the NHDOT's Front Office and the new commissioner, Charles O'Leary, would use this information to decide the scope of the project.

David then read from a prepared environmental document that included a discussion of Section 106 of the National Historic Preservation Act as well as other environmental concerns.

David then introduced Jason Tremblay, Senior Project Engineer, to discuss the three options. The existing bridge is a six span steel stringer bridge, 264' long, built in the late 1950's. The approach roadway has a 12-10 typical that narrows to an 11-3 typical on the bridge. The structurally deficient concrete deck is in need of replacement.

The first option discussed was an at-grade intersection with a new box culvert over the rail line. This option allows for a 12-10 typical on Route 11 and a 12-4 typical on Route 4. Stop signs would be placed on Route 4. Route 11 would flow freely. This option would remove the existing ramps and bridge. A 12' by 12' concrete box culvert with a foot of material on the bottom of the box, approximately 70' long, would allow passage of trail users under the road along the rail line. Since this option would be built off-line, traffic could be maintained on the existing road, and a detour would not be required. This option would have 17,000 square feet of impacts to parcel number 13, owned by Breed Properties II. This option could be built in one construction season.

The second option discussed was to construct a new bridge over Route 4 and a new box culvert over the rail line. This option allows for a 12-10 typical on Route 11. The existing ramp from Route 4 onto Route 11 would be used in this option. It would remove the other existing ramps and bridge. A

12' by 12' concrete box culvert with a foot of material on the bottom of the box, approximately 70' long, would allow passage of trail users under the road along the rail line. A simple span bridge, approximately 75 feet long, would be constructed over Route 4. Since this option would be built off-line, traffic could be maintained on the existing road, and a detour would not be required. This option would have 20,000 square feet of impacts to parcel number 13, owned by Breed Properties II. This option could be built in one construction season.

The third option discussed was to rehabilitate the existing bridge. This rehabilitation would include a new concrete deck, new bridge rail, and painting of the existing steel. The bridge would be built in phases with work starting on the north side in Phase 1 and be completed in Phase 2 on the south side. Traffic control would be alternating one-way traffic. This option would widen the bridge slightly to an 11-4 typical. This option would not have any property impacts. This option could be built in one construction season.

### **Questions and Comments:**

One attendee asked why, in option 2, we kept the Route 4 on ramp. It would require 2 left turns to travel west on Route 11 from Route 4. She wondered why we didn't keep the Route 11 west slip ramp to Route 4 north. The reason for this was to minimize maintenance costs by minimizing the area of pavement, but other alternatives can be looked at to minimize left turns at this intersection.

A gentleman asked if it would be most economical to rehabilitate the bridge. In the short term this would be most economical, but long term solutions also need to be looked at. He also stated there is a huge amount of traffic on this road, especially at 7 AM and on Saturdays, due to the transfer station located close by.

One person asked what brought the NHDOT to this meeting. Is this intersection a bridge or traffic problem? It was explained that the deck is in need of replacement and that the traffic numbers don't require a grade-separated intersection. With regards to future maintenance costs, an at-grade intersection would be less costly to maintain than the existing bridge. This person also asked if future traffic counts would require the at-grade intersection to be signalized. Based off of traffic projections, signals will not be required in twenty years.

Representative Deborah Wheeler mentioned that people use these roads as a shortcut from I-89 to I-93. She also noted that there is a lot of traffic on race weekend and during the winter ski season.

William Remington asked if the rail line would be retained in all options. The box culvert was being proposed to meet the Friends of the Northern Rail Trail request but could be removed to accommodate future train service. William asked what the cost would be to put the bridge back in after removing the box. These numbers were not looked at.

Mark Stetson asked about the lifespan of a new bridge and how much maintenance would be required 40 years from now. Significant maintenance would be required after that much time.

Alan Hanscom, District 2 Engineer, asked about clearances for the rail line. Currently there is a vertical clearance of 21'-2" and a horizontal clearance of 9' from the centerline of tracks to the face of the adjacent pier.

One person asked if Depot Street needed to continue south beyond the intersection in option 1. Ed Hiller of the Andover Historical Society mentioned that there are lots of activities and a fair near the depot, and he wouldn't want to see access blocked to the village. He also mentioned that currently people on Route 4 coming from the north are traveling so fast that they overshoot the ramp to the left to continue on Route 4. He thinks people will see the village if they have to stop at the intersection.

One gentleman asked if there was an exclusive right turn lane from Route 4 onto Route 11 west. Option 1 proposes a wide mouth apron but no exclusive right turn. When asked if there could be both a left and right turn lane, it was indicated that the traffic volumes do not warrant it.

Ed Hiller stated that option 1 is no longer a bridge project but a traffic project. David mentioned that this is true for both option 1 and option 2 and would require ROW acquisitions, and a Public Hearing would be required.

Ed Becker, Andover Rescue, asked how much more life the bridge deck would get if option 3 was chosen. Another 40 to 60 years could be realized on the deck but the steel and substructure, which is already fifty years old would also be getting older. Some patching of the substructures has already taken place. Ed asked when does the at-grade crossing break even with rehabilitation. This number had not been calculated.

Ed Becker expressed his safety concerns for the existing bridge: the curved deck, narrow traffic lanes and a downhill from the west approach. Based on the geometry of the superstructure, the width of the bridge cannot be increased. Ed reiterated that he doesn't like the curved bridge concept.

One person asked which option is the least expensive in the short term? Option 3, the deck rehabilitation is the cheapest option in the short term.

Several people suggested that there could be an option 4, accommodating the train and leaving the ramps in place. Dennis Fenton felt that the DOT had a few more steps to take before an option was chosen. David mentioned that nothing was concrete as of yet and reminded the town people that the NHDOT was looking for the town's input.

One woman asked if a roundabout was considered. Jason mentioned that in order for roundabout to work properly balanced traffic conditions must exist. He was unsure if Highway Design had looked at this possibility but would check with them.

Glenn Laramie, Chief of Police, mentioned that with facing stop signs on Route 4 and Depot Street there could be issues with collisions at this intersection. He felt that unless the double stop could be removed, this would be an unsafe intersection. It was asked why a four-way intersection was needed and why not use the existing Route 4 ramp. Continuity of traffic flow is maintained by using the four-way intersection.

One person asked why the legs of Route 4 and Depot Street "wiggled" before the intersection. This was done to create a 90-degree crossing and to deal with sight distances.

One person asked why Depot Street wasn't one way in the south direction. This could be looked at.

Representative Deborah Wheeler asked if someone in our Roads Division drove this section of Road. David asked Alan Hanscom to comment on the history of this intersection. He mentioned that this work was done before I-89 was conceived. More traffic was expected, and the ramps and entire intersection configuration was designed for this. Once I-89 was built, more traffic used the interstate.

William Remington asked about the life expectancy of new bridge. It is 75 years with routine maintenance.

One woman asked if there were any new materials being used in bridge construction. David mentioned that concrete box culverts as well as weathering steel require minimal maintenance. With option 2, the bridge would be a simple span and there would be no joints over the piers for leaking.

Linda Wilson of the Danbury Planning Board commented about land use policy and that if the State gives up land that has public ownership that it can become commercially used land.

One woman asked if any trees/forests were being impacted on the northeast corner. Currently the slope impacts do not extend that far.

One person asked Linda about the expansion of Ragged Mountain. This issue was coming back to the Danbury Planning Board, and they were waiting to see what happens.

David thanked the attendees for their input and concluded the meeting.

Submitted by:

Jason Tremblay, P.E.

JT/jt

NOTED BY: D. Scott

cc: Town of Andover, District 2, and Bill Cass